

LOGGING INSERTION/REMOVAL OF SERVER BLADES
IN A DATA PROCESSING SYSTEM

ABSTRACT

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This invention is comprised of a data processing system containing at least one main processor connected to a system bus, a system memory connected to the system bus and accessible to each of the main processors, a tamper mechanism, and a local service processor. The tamper mechanism is configured to change state each time the system is inserted into a slot in a rack enclosure. The local service processor is connected to the tamper mechanism and configured to update an insertion log upon detecting a change in state of the tamper mechanism. The insertion log provides a count and a history of rack insertions to which the system has been subjected. The system may include a non-volatile storage element which is updated exclusively by the local service processor that contains the insertion log. The insertion log may include an insertion counter. In this embodiment, the local service processor is configured to increment the insertion counter upon each insertion. The local service processor may be further configured to issue an alert if the insertion counter exceeds a predetermined value. In one embodiment, the system further includes a battery backed real-time clock connected to the local service processor. The local service processor is configured to include real-time information corresponding to each insertion event in the insertion log. Each entry in the insertion log may include the identity of the rack enclosure and the geographical address of the slot of the corresponding insertion event. The local service processor may be configured to detect the tamper mechanism state and update the insertion following a power event such that the insertion log update is independent of configuring the data processing system with a boot image.